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Kevin D. McCarthy

Date 9/7/05

Patent 0-04-107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Ben-Yaakov.  
Serial no.: 10/502,249  
Filed: July 22, 2004  
371(c) date: December 27, 2004  
Title: LOW FREQUENCY INVERTER FED BY A HIGH  
FREQUENCY AC CURRENT SOURCE  
Examiner: N/A  
Art Unit: N/A

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

**Information Disclosure Statement under 37 C.F.R. 1.98**

Applicant submits the enclosed information disclosure statement that is being filed prior to the first office action. Accordingly, it is applicant's opinion that the examiner at the U.S. Patent and Trademark Office should consider these references in determining the patentability of this application.

If Applicant becomes aware of other relevant references that are not cumulative of the submitted references, Applicant will submit them.

Respectfully submitted

Kevin D. McCarthy

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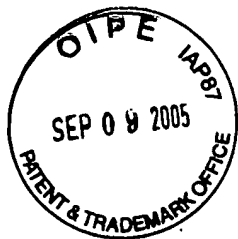
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Sheet 1

of 1

Application Number	10/502,249
Filing Date	12/27/2004
First Named Inventor	Ben-Yakov
Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	0-04-107

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**JP2000262069A2: GATE POWER SUPPLY CIRCUIT**

**Title: JP2000262069A2:**  
**GATE POWER SUPPLY CIRCUIT**

**Country:**

**Kind: JP Japan**

**Inventor: YOSHIOKA TORU;**

**Assignee: SAWAFUJI ELECTRIC CO LTD**

**Published / Filed: 2000-09-22 / 1999-03-08**

**Application Number: JP1999000060318**

**IPC Code: H02M 7/5387; H02M 7/537;**

**Priority Number: 1999-03-08 JP1999000060318**

**Abstract: JP2000262069A2:**

**PROBLEM TO BE SOLVED:** To attain space saving and cost reduction by charging energy stored in a capacitor one after another, and supplying it to a gate driving circuit of a switching element group of a static AC-DC power conversion circuit.

**SOLUTION:** The switching element groups FET1, 4 of a lower arm of a bridge type static power conversion circuit are driven by energy stored in the first capacitors 31, 33. Charging is conducted by the second capacitors 32, 34 through the first diodes 52, 54 from a control power source. The switching element groups FET2, 4 of an upper arm are driven by the energy. At this time, the third capacitor 63 is charged through the second diode 62 from the second capacitors 32, 34. The gate of a thyristor 10 of a static type AC-DC power conversion circuit connected with the forward stage of a bridge type DC-AC power conversion circuit is driven by the energy. It is thus possible to attain space saving and cost reduction by disuse of an insulation transformer.

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**WO0167828A1: LAMP DEVICE AND DEVICE FOR DRIVING DISCHARGE LAMP**

**WO0167828A1:**

**LAMP DEVICE AND DEVICE FOR DRIVING DISCHARGE LAMP**

**Title:** Lamp device and device for driving discharge lamp with an auxiliary power supply

**Country:**

**Kind:** WO World Intellectual Property Organization (WIPO)

**Inventor:** KISAICHI, Hiroyasu; c/o MITSUBISHI DENKI KABUSHIKI KAISHA, 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310, Japan  
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**Assignee:** OSRAM-MELCO LIMITED, 8-29, Kita-Saiwai 2-chome, Nishi-ku, Yokohama-shi, Kanagawa 220-0004, Japan

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**Published / Filed:** 2001-09-13 / 2001-01-26

**Application Number:** WO2001JP0000503

**IPC Code:** H05B 41/282; H05B 41/16;

**ECLA Code:** H02M1/00B12; H02M3/335S; H02M3/335S2; H05B41/282;

H05B41/288K2;

**Priority Number:** 2000-03-09 JP2000000065521

**Abstract: WO0167828A1**

A stepup and stepdown converter (3) includes a transformer (3a), a first switching element (3b) connected in series with the primary of the transformer (3a) connected to AC power line (1), a first diode (3c) connected with the secondary of the transformer (3a), and a first capacitor (3d). Zero cross detector means (10) detects a zero crossing point of the voltage of AC line (1). An auxiliary power circuit (4) includes a second diode (4a) connected to the connection between the transformer (3a) and the first switching element (3b). The auxiliary power circuit charges a second capacitor (4c) through a second diode (4a) with the energy stored in the primary winding of the transformer (3a), and supplies the energy stored in the second capacitor (4c) to a discharge lamp (8) through a second switching element (4b), a third diode (4f), and an inductor (4e). Based on the output from the zero cross detector means (10), a control circuit (9) drives the second switching element (4b) of the auxiliary power circuit (4) for a predetermined period before and after a zero crossing point. [French] [Japanese]

**Attorney, Agent or Firm:** KOBAYASHI, Hisao ;